

## **CHAPTER 4**

### **POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE LOWER TENNESSEE RIVER WATERSHED**

#### **4.1 Background.**

#### **4.2. Characterization of HUC-10 Subwatersheds**

##### **4.2.A. 0602000105 (Tennessee River)**

##### **4.2.B. 0602000107 (North Chickamauga Creek)**

##### **4.2.C. 0602000108 (South Chickamauga Creek)**

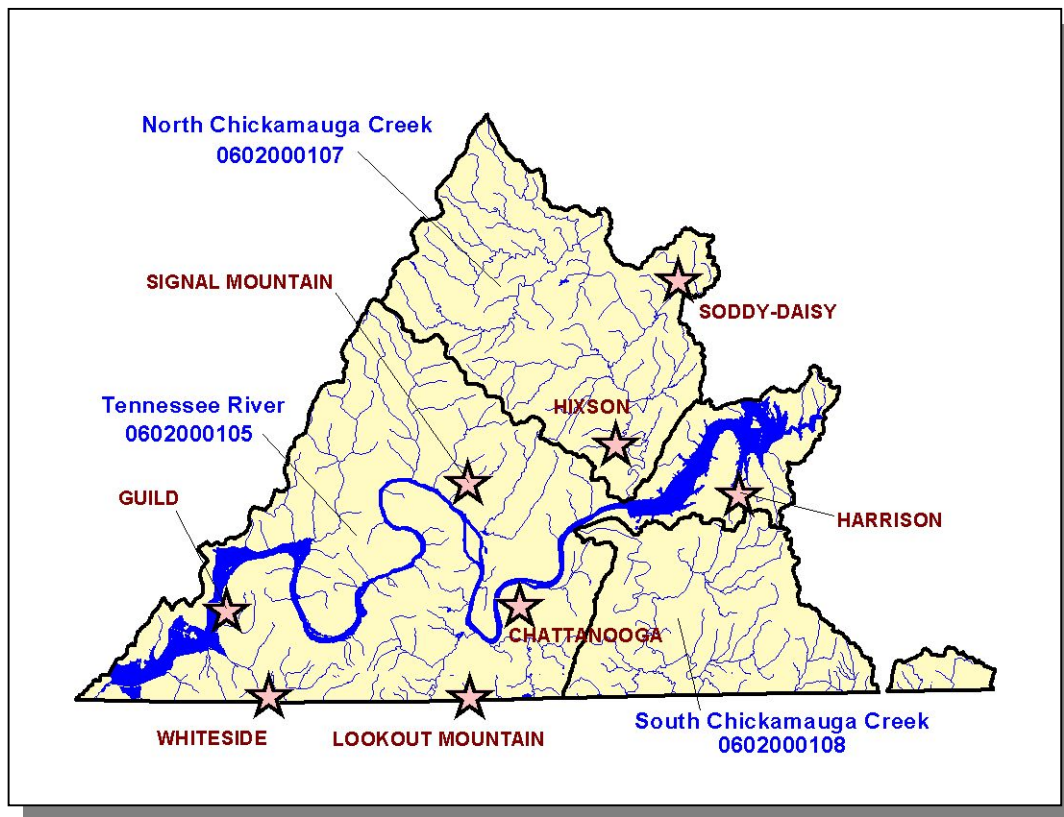
**4.1. BACKGROUND.** This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
- ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
- iii. Description of nonpoint source contributions

The Tennessee portion of the Lower Tennessee River Watershed (HUC 06020001) is composed of one HUC 10 (10-digit) subwatershed and seven HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.



**Figure 4-1. The Group 4 Portion of the Tennessee Portion of the Lower Tennessee River Watershed Consists of three USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Chattanooga, Guild, Harrison, Hixson, Lookout Mountain, Signal Mountain, Soddy-Daisy, and Whiteside are shown for reference.**

**4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS.** The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Group 4 portion of the Tennessee portion of the Lower Tennessee River Watershed.

HUC-10	HUC-12
0602000105	060200010501 (Tennessee River)
	060200010502 (Tennessee River)
	060200010503 (Chattanooga Creek)
	060200010504 (Lookout Creek)
	060200010505 (Suck Creek)
	060200010506 (Tennessee River)
	060200010507 (Tennessee River)
0602000107	060200010701 (Upper North Chickamauga Creek)
	060200010702 (Lower North Chickamauga Creek)
0602000108	060200010801 (East Chickamauga Creek)
	060200010802 (Little Chickamauga Creek)
	060200010803 (West Chickamauga Creek)
	060200010804 (South Chickamauga Creek)

**Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages.** NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.